

Softwood product description

1. Pine sawlog and low grade log classes

Log Class	Diameter Class (cm)	Diameter mm	Lengths m
S	10, 12	80 - 129	1.8, 2.1, 2.4, 3.0, 3.3
A	13.5, 15, 17	130 - 179	1.8, 2.1, 2.4, 3.0, 3.3
B1	19, 21, 23, 25	180 - 259	1.8, 2.1, 2.4, 3.0, 3.3
B2	19, 21, 23, 25	180 - 259	3.6, 3.9, 4.2, 4.5, 4.8, 5.1, 5.4, 5.7, 6.0, 6.3, 6.6
C1	27, 29, 31, 33	260 - 339	1.8, 2.1, 2.4, 3.0, 3.3
C2	27, 29, 31, 33	260 - 339	3.6, 3.9, 4.2, 4.5, 4.8, 5.1, 5.4, 5.7, 6.0, 6.3, 6.6
D1	35 +	340 +	1.8, 2.1, 2.4, 3.0, 3.3
D2	35 +	340 +	3.6, 3.9, 4.2, 4.5, 4.8, 5.1, 5.4, 5.7, 6.0, 6.3, 6.6
Butt log	27 +	260 +	1.8m +

Short log class 1.8m – 3.3m

Long log class 3.6m – 6.6m

2. Pine Sawlog

		S		A			B				C				D				
Maximum sweep or crook (mm)	Long	10	12	13	15	17		21	23	25	27	29	31	33	35	37	39	41	430
	Short	0	0	5	0	0	190	0	0	0	0	0	0	0	0	0	0	0	+
		20	20	20	20	20	20	20	30	30	40	40	50	50	60	60	70	70	80
Large knots NOT allowed in 200mm stem length	Long						1 > 60 mm								1 > 80 mm				
	Short						3 > 50 mm								1 > 60 mm + 1 > 50 mm 1 > 60 mm + 3 > 40 mm 4 > 50 mm				
Knot Clusters Clusters = sum of diams. of knots > 12 mm in 200mm stem length d.o.b. = diam over bark just above knot cluster	Long	Clusters > 3/4 d.o.b not allowed.																	
	Short	Cluster > d.o.b. 1 allowed in 1.8m + logs 2 allowed in 2.4m + logs 3 allowed in 3.0m + logs																	
Eccentricity	Long	Longest radius must not be > 2 x shortest radius.																	
	Shot	No limit																	

3. Butt log

- Pruned and partially pruned logs.
- 26cm + thin end diameter.
- No knot clusters allowed.
- Knots, sweep and eccentricity similar to that of the saw log description.

4. Pine Low grade

		S	A	B	C	D
Maximum sweep or crook (mm)	Long	100 120	135 150 170	190 210 230 250	270 290 310 330	350 370 390 410 430 +
	Short	30 30	40 40 40	40 40 60 60 60 60 70 70	70 70 80 80 80 80 90 90	90 90 100 100 110 100 100 110 110 110
Large knots NOT allowed in 200mm stem length	Long	No limit				
	Short	No limit				
Knot Clusters Clusters = sum of diams. of knots > 12 mm in 200mm stem length d.o.b. = diam over bark just above knot cluster	Long	No limit				
	Short	No limit				

Eccentricity	Long	No limit
	Shot	No limit

- Some of the material will be dry and have blue stain.

5. Pole definition

5.1. Specifications

Pinus Radiata and Pinaster poles to comply with SABS 457 and SABS 753: 1994 specifications as amended from time to time.

5.2. Trimming Allowance

Trimming allowance of up to 100mm shall be added to ensure that poles are of nominal length.

5.3. Pole Cutting List

LENGTH	DIAMETER CLASSES							
	50-79	80-99	100-119	120-139	140-159	160-179	180-199	200-219
1.8		X	X	X				
2.1	X	X	X	X				
2.4	X	X	X	X				
3.0		X	X	X	X			
3.6		X	X	X	X			
4.2		X	X	X	X			
4.8		X	X	X	X			
5.4		X	X	X	X			
6		X	X	X	X	X		
7		X	X	X	X	X		
8		X	X	X	X	X		
9				X	X	X		
10					X	X	X	
11					X	X	X	X
12					X	X	X	X
13					X	X	X	X
14						X	X	X

Building and Fencing poles	1.8m – 4.8m lengths
Telephone poles	5.4m – 7.0m lengths
Transmission poles	8.0m – 14.0m lengths

6. Volume calculations

Volumes of poles as described in paragraph 1, are calculated by computer using the following formula for Pinus species which was in use prior to 1995 to calculate volume tables generally used in South Africa:

$$\text{Mid diameter in cm} = \frac{\text{thin end diameter in cm} + (\text{length in m} \times 0.7)}{2}$$

$$\text{Volume in m}^3 = \frac{(\text{mid diameter in cm})^2 \times 3.14159 \times \text{length in m}}{40\,000}$$

This volume is then rounded off to three decimal places.